

THE PORT AUTHORITY
OF NY & NJ

ENGINEERING PROGRAM MANAGER
WORLD TRADE
CENTER
CHIEF ELECTRICAL ENGINEER

No. Date Revision Approved

ENGINEERING DEPARTMENT

WORLD
TRADE
CENTER

ELECTRICAL

Title
FIRE ALARM SYSTEM
DEVICE UPGRADE
PHASE III
5 WTC 3rd, 4th, 5th & 6th FLOORS

3rd FLOOR
SPEAKER LAYOUT
INSTALLATION AND
REMOVAL
WEST PART PLAN

This drawing subject to conditions in Contract. All
inventions, ideas, designs and methods herein are
reserved to Port Authority and may not be used
without its written consent.

S. FELDSTEIN S. ANSINE A.S.
Designed by Drawn by Checked by

NOVEMBER 26, 1999
Date

WTC-861.573 E-03-2W
Contract Number Drawing Number

NOTES

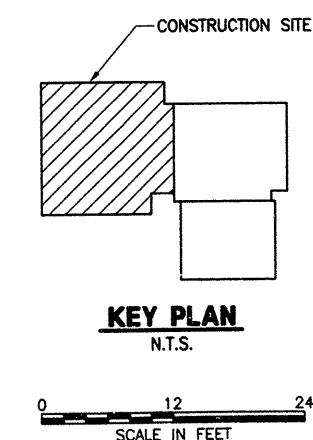
- FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE DWG. E-1.
FOR INSTALLATION DETAILS, SEE DWGS. E-2 AND E-4. FOR WIRING
DIAGRAMS, SEE DWGS. E-3 AND E-4.
- DISCONNECTION OF EXISTING SPEAKER CIRCUIT AND CONNECTION
OF INSTALLED SPEAKER CIRCUIT AT THE TSC AND/OR THE EXISTING
SPEAKER SHALL BE MADE AFTER INSTALLED SPEAKER WIRING IS TESTED
AND OPERATIONAL. THIS WORK SHALL BE DONE IN THE PRESENCE
OF THE ENGINEER.
- DISCONNECTION AND REMOVAL OF EXISTING TENANT AMPLIFIER AND
ASSOCIATED CONDUIT AND WIRING UP TO THIS SPEAKER SHALL BE MADE
AFTER INSTALLED SPEAKERS ARE TESTED AND OPERATIONAL. THIS WORK
SHALL BE DONE IN THE PRESENCE OF THE ENGINEER.
- CONTRACTOR SHALL REMOVE EXISTING SPEAKERS ONLY AFTER INSTALLED
DEVICES ARE OPERATIONAL.
- FOR REMOVAL AND PATCHING PLAN DETAILS (P-1, P-2, P-3 & P-4),
SEE DWG. A-1.
- ALL REMOVED SPEAKERS SHALL BE RETURNED TO THE ENGINEER.
- ALIGN CENTER LINES OF SPEAKERS (ON WHICH WORK IS TO BE DONE
IN THE CORRIDORS) TO THE CENTER LINE OF THE CORRIDOR. IN CASE
OF CONFLICT WITH EXISTING CEILING LIGHTING AND GRILLS, FINAL
LOCATION OF SPEAKERS SHALL BE ADJUSTED WITH THE APPROVAL
OF THE ENGINEER.
- SINCE FIRE ALARM CIRCUIT LENGTH IS CRITICAL, ROUTING AND
INSTALLATION OF ALL FIRE ALARM CIRCUITS SHALL BE AS SHOWN
ON DRAWING.
- COORDINATE REMOVAL OF ALL SPEAKERS WITH ENGINEER. DISCONNECT
AND ABANDON EXISTING SPEAKER CIRCUITS IN CEILING. TAPE ENDS OF
ABANDONED CONDUCTORS AND TAG AS ABANDONED. THIS WORK SHALL
BE DONE IN THE PRESENCE OF THE ENGINEER.
- REPLACE EXISTING SPEAKER WITH THE SHOWN WATTAGE RATED SPEAKER,
AND REWIRE AS SHOWN. EXISTING BACKBOX CAN BE UTILIZED IF IT IS
SIMILAR TO THE TYPICAL SPEAKER BOX. SEE INSTALLATION DETAIL "A"
ON DWG. E-2.

SPEAKER CIRCUIT/LOADING TABLE

SPEAKER TAP/DB SETTING	Watts	1/8	1/4	1/2	1	2	4	TOTAL POWER (Watts)	CIRCUIT LENGTH (ft.)
SPK-C	75	78	81	84	87	90		1,375	241
SPK-D	2	1	4	0				2,500	231
SPK-E	SPARE	SPARE	SPARE	SPARE					
SPK-F	SPARE	SPARE	SPARE	SPARE					
SPK-G	22	7	13	3				14,000	1,357
SPK-H	21	4	10	2				10,625	1,128
GRAND TOTAL								28,500	2,957

I HEREBY CERTIFY THAT THIS IS A TRUE AND
CORRECT COPY OF ONE OF THE CONTRACT
DRAWINGS CONSTITUTING A PART OF
CONTRACT NO. WTC-861.573 IN
THE FORM IN WHICH SAID DRAWINGS
EXISTED AT THE TIME THE SAID CONTRACT
WAS EXECUTED BY THE PARTIES.

DATE 2/1/00 CONTRACTOR (ARCH.)
DATE 2/1/00 ENGINEERING PROGRAM MGR.



REVISION No. 9

